

CLAIMS

What is claimed is:

1. A mobile device comprising:
means for detecting when the mobile device has moved from a first base station coverage area to a second base station coverage area; and
means for creating a data-layer message, the message comprising an identification of the second base station.
2. The mobile device of claim 1 further comprising:
means for transmitting the data-layer message to a location-tracking application.
3. The mobile device of claim 1 wherein the message is an electronic mail message.
4. The mobile device of claim 1 wherein the message is a short message service (SMS) message.
5. The mobile device of claim 1 wherein the message is a multimedia messaging service (MMS) message.
6. The mobile device of claim 1 wherein the message comprises network measurement report information.
7. The mobile device of claim 2 wherein the means for transmitting transmits the message via a wireless application protocol (WAP) wireless transport layer (WTP) connection.
8. The mobile device of claim 1 wherein the means for detecting and the means for creating comprise software applications running on a processor within the mobile device.
9. The mobile device of claim 1 further comprising:
means, selectable by a user, for preventing the creating of the data-layer message.

10. A method for providing location information from a wireless device comprising:
detecting when the wireless device changes from a first cell to a second cell; and
sending a data-layer message from the wireless device to a location application, wherein
the data message comprises an identification of the second cell.
11. The method of claim 10 further comprising:
monitoring a first power level of a first base station signal in the first cell;
monitoring a second power level of a second base station signal in the second cell; and
determining when the second base station signal is greater than the first base station
signal.
12. The method of claim 10 further comprising:
receiving, from the location server, a provisioning message comprising data selected
from the group consisting of:
a data address that is to receive the data-layer message;
a start time of an event watch;
an end time of the event watch;
a minimum reporting interval;
a list of cells or areas for which the wireless device should send the data-layer message
when leaving or entering; and
a list of wireless device status indicators for which the data-layer message should be sent.
13. The method of claim 10 wherein the data-layer message is an email message.
14. The method of claim 10 wherein the data-layer message is directed to a uniform
resource locator (URL) that is identified by the location application.
15. The method of claim 10 wherein the message is a short message service (SMS)
message.
16. The method of claim 10 wherein the message is a multimedia messaging service
(MMS) message.

17. A method for obtaining location information comprising:
sending a message to a mobile device, wherein the message identifies a data address to which the mobile device is to send report messages whenever the mobile device switches cells in a wireless network; and
receiving report messages from the mobile device, wherein the report messages comprise a currently serving cell identifier for the mobile device.
18. The method of claim 17 further comprising:
correlating the currently serving cell identifier to physical location information; and
sending the physical location information to a location-based application.
19. The method of claim 18 wherein the location-based application provides a service based upon the physical location information.
20. The method of claim 19 wherein the service is selected from the group consisting of:
advertising services;
instant messenger services; and
tracking services.
21. The method of claim 17 wherein the data address is a uniform resource locator (URL) for a server running a location application.
22. The method of claim 17 wherein the report message is of a type selected from the group consisting of:
email messages
short message service (SMS) messages; and
multimedia messaging service (MMS) messages.
23. A mobile device comprising:
means for detecting when the mobile device has moved a predetermined distance; and
means for creating a data-layer message, the message comprising location information for the mobile device.

24. The mobile device of claim 23 wherein the location information is geographical coordinates.

25. The mobile device of claim 23 wherein the location information is an identifier for a base station currently in communication with the mobile device.

26. The mobile device of claim 23 further comprising:
a global positioning system (GPS) apparatus capable of providing location information for the mobile device.

27. The mobile device of claim 26 further comprising:
assisted GPS (AGPS) means for improving location accuracy using information from a wireless network.

28. The mobile device of claim 23 wherein the data-layer message further comprises:
network measurement report information for the mobile device.

29. The mobile device of claim 23 wherein the data-layer message further comprises:
status information for the mobile device.

30. The mobile device of claim 29 wherein the status information is selected from the group consisting of:
network presence information;
busy status;
idle status; and
a change in status.

31. The mobile device of claim 23 further comprising:
means for sending the data-layer message to a predesignated address whenever the mobile device moves a specified distance.

32. The mobile device of claim 23 further comprising:
means, selectable by a user, for preventing the creating of the data-layer message.

33. A method for providing location information comprising:
detecting, at a mobile device, when the mobile device has moved a predetermined distance; and
sending a data-layer message to a predesignated address, the message comprising location information for the mobile device.
34. The method of claim 33 further comprising:
receiving, at the mobile device, instructions to send the data-layer message to the predesignated address.
35. The method of claim 33 further comprising:
receiving, at the mobile device, instructions to send the data-layer message whenever the mobile device moves a specified distance.
36. The method of claim 33 further comprising:
receiving, at the mobile device, instructions to send the data-layer message whenever the mobile device enters and/or leaves an area identified in a list of one or more areas.
37. The method of claim 36 wherein the list of one or more areas comprises areas selected of the group consisting of:
wireless network location areas;
geographic areas; and
wireless network cells.
38. The method of claim 33 wherein the data-layer message further comprises:
a network measurement report.
39. The method of claim 33 further comprising:
detecting a user selection to not send the data-layer message.